AMENDMENTS TO THE CLAIMS:

Please amend claim 1 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) Apparatus for processing data, said apparatus comprising:

data processing logic operable to execute data processing operations;

one or more trace data sources operable to generate respective streams of trace data for said data processing logic;

one or more trace data sinks operable to receive respective streams of trace data from said one or more trace data sources; and

at least one flush signal generator ~~operable to generate~~for generating a flush request signal passed to at least one of said one or more trace data sources to signal a flush point within any trace data buffered within said at least one of said one or more trace data sources; wherein said at least one of said one or more trace data sources ~~is operable to trigger~~triggers a flush complete response when any trace data generated by said at least one trace data source prior to said flush point has been output to one of said one or more trace data sinks.

2. (original) Apparatus as claimed in claim 1, wherein said at least one of said one or more trace data sources continue to generate trace data following receipt of said flush request signal.

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3. (original) Apparatus as claimed in claim 1, wherein said flush complete response comprises generating a flush complete signal passed to said at least one flush signal generator.

4. (original) Apparatus as claimed in claim 3, wherein said at least one flush signal generator passes said flush request signal to a plurality of trace data sources and receipt of flush complete signals from all of said plurality of trace data sources indicates all trace data generated by said plurality of trace data source prior to said flush point has been output.

5. (original) Apparatus as claimed in claim 1, wherein said at least one flush signal generator is part of a trace data sink.

6. (original) Apparatus as claimed in claim 1, wherein one or more trace data buses connect said one or more trace data sources to said one or more trace data sinks and at least one bus bridge is interposed within one of said one or more trace data buses, said at least one flush signal generator being part of one of said at least one bus bridge.

7. (original) Apparatus as claimed in claim 6, wherein said at least one bus bridge is a power-down bus bridge operable upon receipt of a power-down signal to generate a flush request signal and to delay power down of said one or more trace data sources until all trace data generated by said trace data sources prior to said flush point has been output.

8. (original) Apparatus as claimed in claim 7, wherein said power-down bridge bus forces said one of said one or more trace buses into a predetermined state prior to power down of said one or more trace data sources.

9. (original) Apparatus as claimed in claim 7, wherein said data processing logic for which said one or more trace data sources generates trace data is powered down with said one or more trace data sources.

10. (original) Apparatus as claimed in claim 9, wherein said data processing logic and said one or more trace data sources are within a common power domain within an integrated circuit comprising a plurality of power domains.

11. (original) Apparatus as claimed in claim 1, wherein said flush signal generator operable upon receipt of a power-down signal to generate and flush request signal and to delay power down of said one or more trace data sources until all trace data generated by said trace data sources prior to said flush point has been output.

12. (original) Apparatus as claimed in claim 6, comprising a trace data funnel operable to combine trace data signals received from a plurality of trace data sources via respective trace data buses onto a single trace data bus.

13. (original) Apparatus as claimed in claim 12, wherein said at least one flush signal generator is part of said trace data funnel.

14. (original) A method of processing data, said method comprising the steps of:

executing data processing operations with data processing logic;

generating respective streams of trace data for said data processing logic with one or more trace data sources;

receiving respective streams of trace data from said one or more trace data sources with one or more trace data sinks operable; and

generating with at least one flush signal generator a flush request signal passed to at least one of said one or more trace data sources to signal a flush point within any trace data buffered within said at least one of said one or more trace data sources; wherein

said at least one of said one or more trace data sources is operable to trigger a flush complete response when any trace data generated by said at least one trace data source prior to said flush point has been output to one of said one or more trace data sinks.

15. (original) A method as claimed in claim 14, wherein said at least one of said one or more trace data sources continue to generate trace data following receipt of said flush request signal.

16. (original) A method as claimed in claim 15, wherein said flush complete response comprises generating a flush complete signal passed to said at least one flush signal generator.

17. (original) A method as claimed in claim 16, wherein said at least one flush signal generator passes said flush request signal to a plurality of trace data sources and receipt of flush

complete signals from all of said plurality of trace data sources indicates all trace data generated by said plurality of trace data source prior to said flush point has been output.

18. (original) A method as claimed in claim 14, wherein said at least one flush signal generator is part of a trace data sink.

19. (original) A method as claimed in claim 14, wherein one or more trace data buses connect said one or more trace data sources to said one or more trace data sinks and at least one bus bridge is interposed within one of said one or more trace data buses, said at least one flush signal generator being part of one of said at least one bus bridge.

20. (original) A method as claimed in claim 19, wherein said at least one bus bridge is a power-down bus bridge operable upon receipt of a power-down signal to generate a flush request signal and to delay power down of said one or more trace data sources until all trace data generated by said trace data sources prior to said flush point has been output.

21. (original) A method as claimed in claim 20, wherein said power-down bridge bus forces said one of said one or more trace buses into a predetermined state prior to power down of said one or more trace data sources.

22. (original) A method as claimed in claim 20, wherein said data processing logic for which said one or more trace data sources generates trace data is powered down with said one or more trace data sources.

23. (original) A method as claimed in claim 22, wherein said data processing logic and said one or more trace data sources are within a common power domain within an integrated circuit comprising a plurality of power domains.

24. (original) A method as claimed in claim 14, wherein said flush signal generator operable upon receipt of a power-down signal to generate and flush request signal and to delay power down of said one or more trace data sources until all trace data generated by said trace data sources prior to said flush point has been output.

25. (original) A method as claimed in claim 19, comprising a trace data funnel operable to combine trace data signals received from a plurality of trace data sources via respective trace data buses onto a single trace data bus.

26. (original) A method as claimed in claim 25, wherein said at least one flush signal generator is part of said trace data funnel.